



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

*[Handwritten signature]*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,167	12/29/2000	Merle L. Miller	2069.008600	8941

23720 7590 12/11/2003

WILLIAMS, MORGAN & AMERSON, P.C.  
10333 RICHMOND, SUITE 1100  
HOUSTON, TX 77042

EXAMINER

HAROLD, JEFFEREY F

ART UNIT	PAPER NUMBER
----------	--------------

2644

DATE MAILED: 12/11/2003

*2*

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/752,167

Applicant(s)

MILLER, MERLE L.

Examiner

Jefferey F. Harold

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/24/00
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-12 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1-8 and 13-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Moyal et al. (United States Patent 5,809,109), hereinafter referenced as Moyal.

Regarding **claim 1**, Moyal discloses an integrated ring sensor with fault detection. In addition, Moyal discloses a process for ring-trip detection in an inherent line card, consisting of:

using a digital to analog converter (110) for processing voice signals; receiving a ringing control signal; transmitting a ringing signal to a subscriber line in response to the ringing control signal; receiving a portion of the ringing signal from the subscriber line; converting the portion of the ringing signal to a digital signal using the digital-to-analog converter; and providing a ring-trip indication in response to the digital signal, as disclosed at column 2, line 41 through column 5, line 10 and exhibited in figure 4.

Regarding **claim 2**, Moyal discloses everything claimed as applied above (see claim 1), in addition Moyal discloses wherein the ringing signal comprises an AC signal, as disclosed at column 2, lines 57-64 and exhibited in figure 4.

Regarding **claim 3**, Moyal discloses everything claimed as applied above (see claim 1), in addition, Moyal discloses terminating the ringing signal in response to the ring-trip indication, as disclosed at column 4, lines 8-50 and exhibited in figure 4.

Regarding **claim 4**, Moyal discloses a process, consisting of processing a voice signal in a non-ringing state, which reads on claimed "low-current mode" of a line card, the line card having an analog-to-digital (110) converter for converting the voice signal to a digital signal; receiving a ringing control signal; switching to a ringing state, which reads on claimed "high-current mode", of the line card in response to the ringing control signal; and ringing the telephone device (10) in response to switching to the ringing state of the line card; converting the portion of the ringing signal to a digital signal using to the digital-to-analog converter; and providing ring-trip indication in the ringing state in response to the digital signal, as disclosed at column 3, line 10 through column 5, line 10 and exhibited in figure 4.

Regarding **claims 5 and 6**, Moyal discloses everything claimed as applied above (see claim 4), in addition claims 5 and 6 are interpreted and thus rejected for the reasons set forth above in the rejection of claims 2 and 3.

Regarding **claims 7, 8, and 13-18**, Moyal discloses everything claimed as applied above in the rejection of claims 1-6, in addition claims 7, 8 and 13-18 are

Art Unit: 2644

interpreted and thus rejected for the reasons set forth above in the rejection of claims 1-6.

***Allowable Subject Matter***

2. ***Claims 9-12*** are allowed.

3. The following is an examiner's statement of reasons for allowance:

Regarding **claim 9**, the prior art of record discloses an apparatus consisting of a ringing generator capable of providing a ringing signal to a subscriber line in response to a control signal, an analog-to-digital converter for processing voice signals, however, the prior art of record fails to discloses or fairly suggest a feed back loop having an input and output terminal, a switch capable of coupling the input and output terminal of the feedback loop in response to receiving a control signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is (703) 306-5836. The examiner can normally be reached on Monday-Friday 9:30am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4800.

JFH  
December 8, 2003

  
**XU MEI**  
**PRIMARY EXAMINER**